

**DOCKET NO.: CELL-0086**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In Re Application of:**

**Porter, J.R., et al.**

**Confirmation No.: 8439**

**Application No.: 09/450,999**

**Group Art Unit: 1624**

**Filing Date: November 29, 1999**

**Examiner: Thomas McKenzie**

**For:  $\beta$ -ALANINE DERIVATIVES**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:
- ☐ Certification in Accordance with § 1.97(e) is attached; or
- ☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.
- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:
- ☐ Certification in Accordance with § 1.97(e) is attached;
- or
- ☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.
- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).
- ☒ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
- ☐ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☐ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

## EXCEPT THAT:

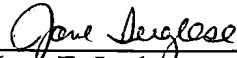
- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☐ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☐ Copies of references [list as appropriate] listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. \_\_\_\_\_, filed \_\_\_\_\_.

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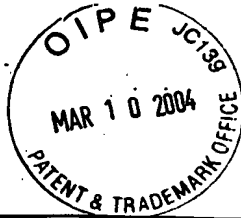
- ☐ The relevance of those listed references which are not in the English language is as follows:

☐ There are no listed references which are not in the English language.

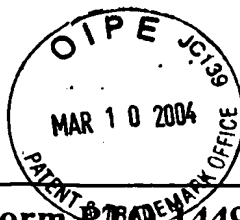
Date: March 9, 2004

  
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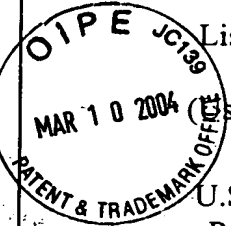
<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Docket No. <b>CELL-0086</b>	Serial No. <b>09/450,999</b>
		Applicant <b>John Robert Porter, John Clifford Head,          Graham John Warrelow, and          Sarah Catherine Archibald</b>	
		Filing Date <b>November 29, 1999</b>	Group <b>Not Yet Assigned</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	<b>AA</b>	Abraham, W.M. et al., " $\alpha_4$ -Integrins Mediate Antigen-Induced Late Bronchial Responses and Prolonged Airway Hyperresponsiveness in Sheep," <i>J. Clin. Invest.</i> , <b>1994</b> , <i>93</i> , 776-787	
	<b>AB</b>	Bach et al., "Anomalous optical rotation and circular dichroism of N-thioacylated.alpha.-amino acids and deriva," <i>Acta Chem. Scand.</i> , <b>1966</b> , <i>20(10)</i> , 2781-2794	
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	<b>AD</b>	Berlin, C. et al., " $\alpha_4\beta_7$ Integrin Mediates Lymphocyte Binding to the Mucosal Vascular Addressin MAdCAM-1," <i>Cell</i> , <b>1993</b> , <i>74</i> , 185-195	
	<b>AE</b>	Binns, R.M. et al., "The Role of E-Selectin in Lymphocyte and Polymorphonuclear Cell Recruitment into Cutaneous Delayed Hypersensitivity Reactions in Sensitized Pigs," <i>J. Immunol.</i> , <b>1996</b> , <i>157</i> , 4094-4099	
	<b>AF</b>	Briskin, M.J. et al., "Structural Requirements for Mucosal Vascular Addressin Binding to Its Lymphocyte Receptor $\alpha_4\beta_7$ ," <i>J. Immunol.</i> , <b>1996</b> , <i>156</i> , 719-726	
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<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
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	<b>BE</b>	Shroff, H.N. et al., "Small Peptide Inhibitors of α <sub>4</sub> β <sub>7</sub> Mediated MAdCAM-1 Adhesion to Lymphocytes," <i>Barge. Med. Chem. Letts.</i> , <b>1996</b> , 6(21), 2495-2500	
	<b>BF</b>	Sonnenberg, A., "Integrins and Their Ligands," <i>Curr. Topics Microbiol. Immunol.</i> , <b>1993</b> , 184, 7-35	
	<b>BG</b>	Springer, T.A., "Adhesion receptors of the immune system," <i>Nature</i> , <b>1990</b> , 346, 425-434	
	<b>BH</b>	Springer, T.A., "Traffic Signals for Lymphocyte Recirculation and Leukocyte Emigration: The Multistep Paradigm," <i>Cell</i> , <b>1994</b> , 76, 301-314	
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	<b>BI</b>	Tsunematsu, H. et al., "Hydrolysis of phenylthiazolones of <i>p</i> -guanidinophenylalanine and arginine by trypsin and related enzymes," <i>J. Biochem.</i> , <b>1983</b> , <i>94</i> (4), 1119-1125	
	<b>BJ</b>	Vanderslice, P. et al., "A Cyclic Hexapeptide is a Potent Antagonist of $\alpha 4$ Integrins," <i>J. Immunol.</i> , <b>1997</b> , <i>158</i> , 1710-1718	
	<b>BK</b>	Yanagisawa, H. et al., WO 97/37970, "Preparation of phenylalkylcarboxylic acid derivatives lowering blood sugar level," <i>Chemical Abstracts</i> , <b>1997</b> , Abstract 127:307307, 4 pages	
	<b>BL</b>	Yang, X., "A predominant role of integrin $\alpha 4$ in the spontaneous development of autoimmune diabetes in nonobese diabetic mice," <i>Proc. Natl. Acad. Sci. USA</i> , <b>1994</b> , <i>91</i> , 12604-12608	
	<b>BM</b>	Yednock, T.A., "Prevention of experimental autoimmune encephalomyelitis by antibodies against $\alpha 4 \beta 1$ integrin," <i>Nature</i> , <b>1992</b> , <i>356</i> , 63-66	
	<b>BN</b>	Whitlock, B.J. et al., "Structure and synthesis of lathyrine," <i>J. Org. Chem.</i> , <b>1965</b> , <i>30</i> , 115-118	
	<b>BO</b>	WPI / Derwent No. XP-002076854, Japanese Patent No. <b>JP 04 193 895 A</b> (Ajinomoto, K.K.), July 13, <b>1992</b> , DW9234, 1 Page, Abstract Only	
	<b>BP</b>	WPI / Derwent No. XP-002076855, Japanese Patent No. <b>JP 56 049 373 A</b> (Dainippon Pharm Co Ltd), May 2, <b>1981</b> , DW8125, 1 Page, Abstract Only	
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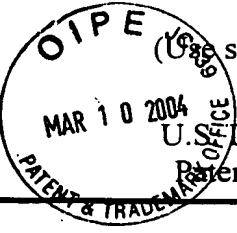
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Sarah Catherine Archibald**U.S. Department of Commerce  
Patent and Trademark OfficeFiling Date  
**November 29, 1999**Group  
**Not Yet Assigned****U. S. PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Name	Class	Subclass
	<b>BQ</b>	4,987,132	01/22/91	Mase et al.	514	252
	<b>BR</b>	5,164,372	11/17/92	Matsuo et al.	514	19
	<b>BS</b>	5,260,277	11/09/93	McKenzie	544	18
	<b>BT</b>	5,296,486	03/22/94	Lazer et al.	514	333

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Examiner Initial		Document No.	Date	Country	Translation YES NO	
	<b>BU</b>	0 031 104 A1	07/01/81	EP	X	
	<b>BV</b>	0 048 763 A1	04/07/82	EP	X	
	<b>BW</b>	0 144 230 A	06/12/85	EP	X	
	<b>BX</b>	0 322 068 A1	06/28/89	EP	X	
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	<b>BZ</b>	0 596 406 A1	05/11/94	EP	X	
	<b>CA</b>	0 710 659 A1	05/08/96	EP	X	
	<b>CB</b>	0 842 943 A2	05/20/98	EP	X (Abstract Only)	
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	<b>CD</b>	WO 86/02353	04/24/86	PCT	X	
	<b>CE</b>	WO 93/09795	05/27/93	PCT	X	
	<b>CF</b>	WO 94/15954	07/21/94	PCT	X (Abstract Only)	

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<b>FOREIGN PATENT DOCUMENTS</b>						
Examiner Initial		Document No.	Date	Country	Translation YES NO	
	CG	WO 94/29285	12/22/94	PCT	X	
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	DM	DE 23 16 881 A	10/11/73	Germany	X (Abstract Only)	
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